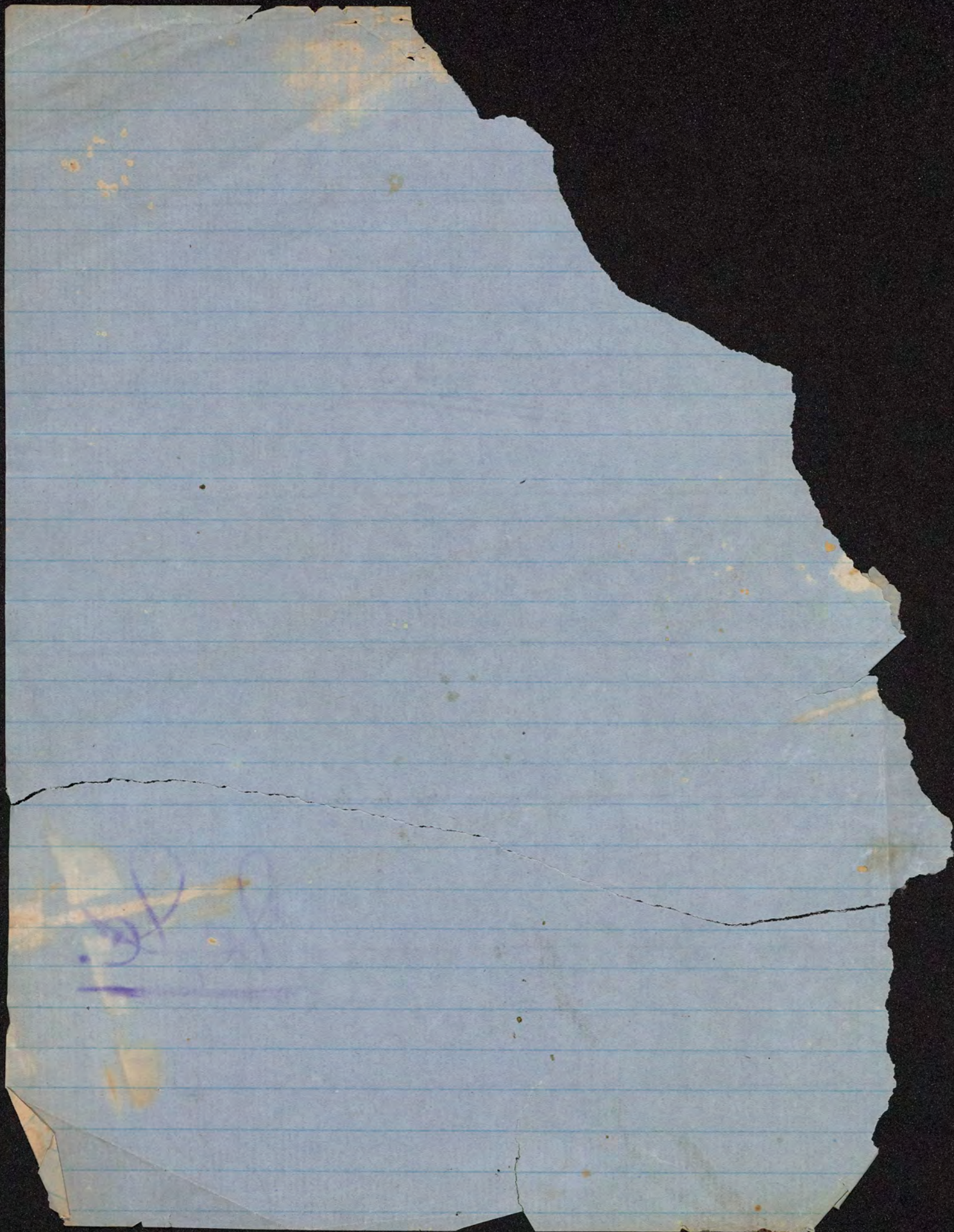


Lectures:
on
Correlation of
Forces.

Delivered at Philadelphia College
of Medicine, &c, &c.

about 1854, &c, &c.

Also - &c, &c.



Static Conditions of Force.

Frictional Electricity -

Magnetism - ?

~~Life-Force~~Dynamic States of Force.

Heat -

Voltage Electricity - Electro-magnetism?

Excito-Motor Force.

Concentral Forces.

Gravitational & } attraction.

Cohesive

Chemical Affinity.

Excentral Forces.

Heat

Light

Life-Force - (Organic Force.)

I Simple & compl. compounds -

earliest decomp.

I binary - ternary - quaternary

I Organic - early modification - hence C

III Capillary & subcutaneous - III Endosmosis

Spores - cells - affinity of tissues - Saline - pyrogen - choline - Laws

I Diffusion of Gases also for Respiration

Then the

Life or Organic Force

occurring in bodies of living beings, of various kinds, necessary for life alone. The functions, as it were, of the organism, are mechanical, chemical, electrical. The functions, as it were, of the organism, are mechanical, chemical, electrical. The functions, as it were, of the organism, are mechanical, chemical, electrical.

II Exclusion III - Over -

not only in highest, but lowest forms; not only in man - but animals;

not merely in animals, - but in plants - Over

what have we in common with plants?

Condition of Life ?

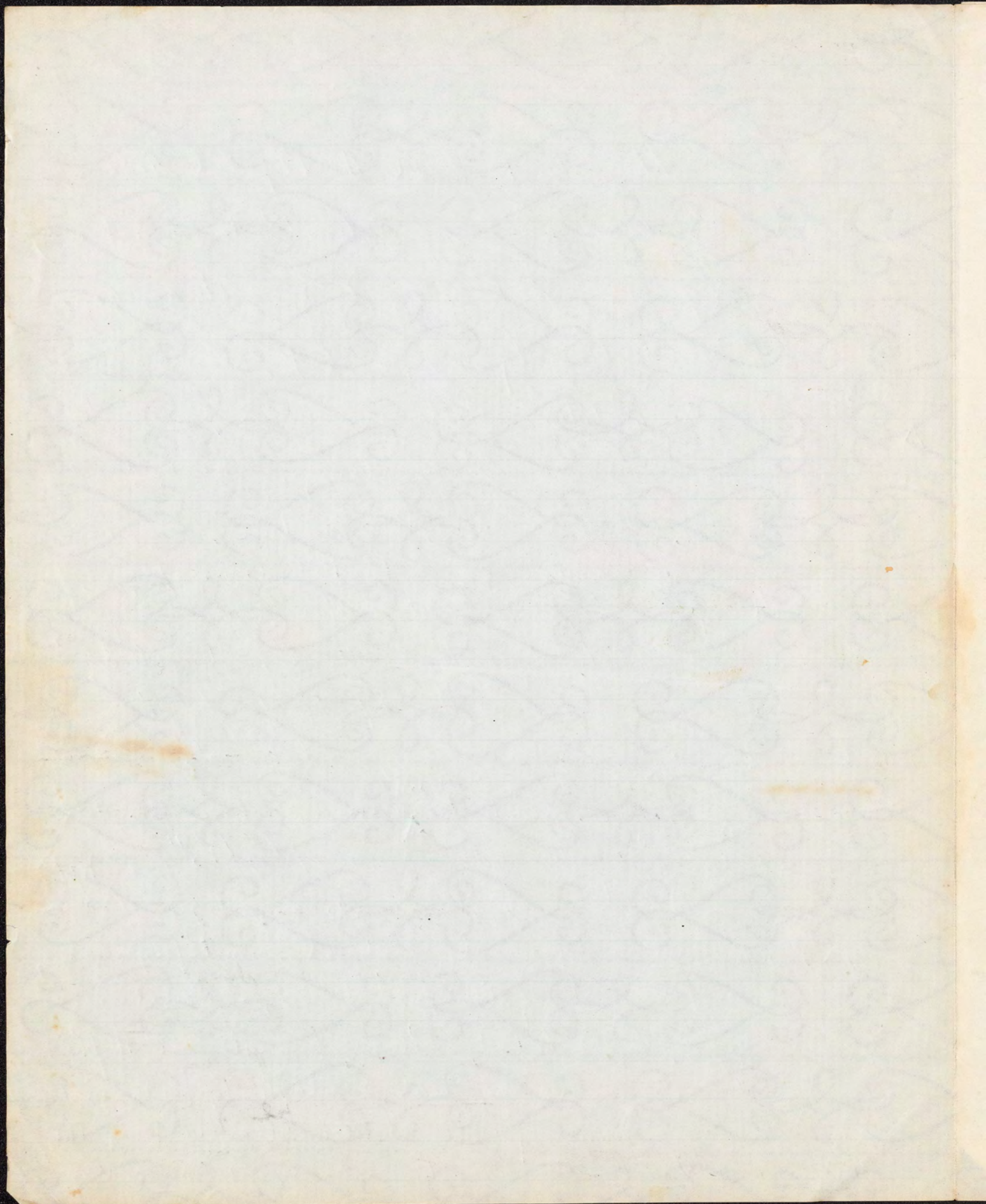
m. - a - p. - g.

Handwritten signature or mark.

The subject of all the Physical Forces, -
as Catalogued before us, - is of interest to us, not only
because Life cannot be understood without com-
parison & illustration by them, - but, also, because,
^{in them,} I make the quotation without irreverence, - in them
^{we} live & move and have our being. We will see
presently that, without irreverence, this is true.

Here it is that our subject leads us upward, far.
It is said by an eloquent writer, that, as there is ^{no} ^{of space,}
wall between our bodily sight and the infinite blue, so
there is, between our minds and the Infinity of Truth, ^{in any direction,} ^{no}
dark wall of ^{absolute} limit & exclusion, - but ~~only a~~ ^{vast} ~~dim~~
~~diminution~~ ^{only} a fading off into the distance, where thought
grows, as it were, "Dark with excess of light."

^{Nature}
~~amid facts~~ We turn our glasses into any region of ~~the~~
~~known~~ / Statical or Dynamical, material or metaphysical,
and ^{we} find, at the far limit of ~~our~~ field of view, - ^{always} indications of
a primal power, beyond, behind, above, beneath all the phenomena,
which ^{man} the Superstitious call Supernatural, & multiplies by his imagination
into a Mythology or Demonology; the abstractionist calls it by the
vague name of Law; - the Scientific man names it ~~the~~ First Cause,



the Theist or Theologian recognizes it as the Unity of Divine Power in the Universe.

This, the first suggestion, under clouds, of the Savage mind, - becomes alike the ultimate conclusion of secondary Philosophy. It must enter as a part ~~of~~^{into} every scheme of knowledge: without it, we are left with as baseless and dream-like & fables, in every department, - as the tortoise- & elephant- held world-fig-ment of the old Hindoos. In the language of Cousin, the French Philosopher, the Divine Being must be the First Principle, - the First Fact of Existence.

It is important, therefore, in attempting to give a Definition, (as was done in the last Lecture), of the term Force, - not to place an erroneous construction ^{upon} ~~the~~ the word Cause as applied to the Physical Vital Forces. I lay down, (to show the broad reach which this topic demands in its full contemplation), the belief, asserted on the platform of the soundest & most cautious scientific leaders, - that, in Physical Nature, the term "Secondary causes" is but provisional & convenient; and that, in Physical Nature, (so far as laws are observed) there is but One Cause, - one Power, - and that the Power of God. The only other powers

which affect the ^{of creatures} condition of things, are those of
moral agents, ^{endowed} with free will. These are
the true secondary or finite Causes, as the first
is Infinite.

I will not go farther into this
most abstract and difficult region. We will descend
to our subject, — and once more define the Physical
forces as, — merely, stages of motion, ^{or varieties} ^{stages or phases of motion}, or affections
of matter: and, once more, we justify their study
to the Physician.

I had expected the contents of this
box to be of great value. There are
a few things of interest, but the
rest is of little value. I will not
bother to list the contents of the
box, as they are of little value.
I will only mention that the
box contains a few things of
interest, but the rest is of little
value. I will not bother to list
the contents of the box, as they
are of little value. I will only
mention that the box contains a
few things of interest, but the
rest is of little value.